Oil and Gas Update, Sakhalin Region, Russian Far East
Country: Russia
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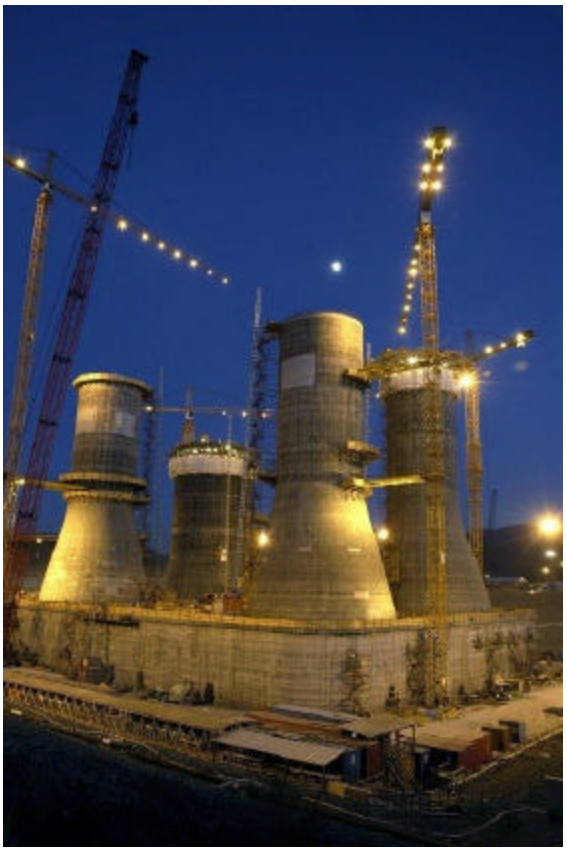
General facts

Russia, the world's second-biggest crude exporter after Saudi Arabia, with immense untapped oil and gas reserves, represents a major attraction for foreign investors in its energy sector. Russia's oilmen have always said that the country's reserves have been vastly underestimated. A string of oil discoveries and new exploration this year have added substance to the claim that the country's real reserves could be three times bigger than thought. *According to the BP Statistical Review, Russia has reserves of 60 bn barrels of oil, making it a top five oil country - although Russia's oil men say the BP survey uses the strictest criteria, used to calculate oil companies value by America's Securities and Exchange Commission (SEC).* The real reserves could be as much as 180 bn barrels, the second largest after Saudi Arabia's. "For the first time in 20 years Russia is open to new technologies, which have been brought in to boost production," says Chris Weafer, head of research at Alfa Bank. "I believe that by the end of the decade Russia will be proven to have 50 % more hydrocarbon reserves than what Saudi Arabia has today," said Paul Collison, global emerging markets oil and gas strategist at Brunswick UBS. Lord Browne, CEO of BP, agreed that reserves would increase. The SEC rules also do not allow Russian companies to book reserves, which are expected to be produced beyond the expiry date of their current licenses. Most Russian companies incorporated in the middle of 1990s were given 25-year licenses, which will expire in the next 14-16 years. When the Russian government renews these licenses, Russian companies will be able to book more barrels.



At a meeting in June, 2005, President Vladimir Putin told a group of US investors that Russia is ready to welcome US and other foreign oil companies into the country's large and developing energy sector. 'We will boost oil and gas extraction, boost hydrocarbon exports, and extend our cooperation with the biggest world companies, including American, both in the continental part (of Russia) and in the (offshore) Barents Sea, Sakhalin and other territories,' Putin said. At a time of record oil prices, Putin promised an increase in deliveries of oil and natural gas to the United States.

A joint report by Russian and US energy and economy officials will present "specific projects on selling Russian liquefied natural gas (LNG) to the United States, increasing Russian oil exports through developing new deposits and boosting its transport infrastructure," Putin said. Under those plans, "the United States, without additional investment, could import 50 million tons of Russian oil every year." Russia announced plans in October to ship 37 million tons of LNG to a terminal in Mexico over the 20 years starting 2008 as part of an arrangement to channel LNG from Sakhalin Island in Russia's Far East to the United States.

International oil companies are eager to expand in Russia so that they can rapidly boost oil reserves and production. BP's Russian venture, TNK-BP, helped add $ 7 bn to BP's revenue in the first half of this year, BP CEO John Browne said earlier. Exxon, ChevronTexaco, ConocoPhillips and Marathon Oil, the four biggest US oil companies, plan to expand in Russia, former Energy Minister Igor Yusufov said in February, 2004.

World LNG production will more than double to 380 mm tons in 2010, up from 149 mm tons expected this year, said Mohammed Taleb, an assistant to a vice president at Algeria's Sonatrach, the world's largest LNG producer last year. Russia and Norway may become two new LNG producers in the near future, joining 12 countries that already supply the fuel, said Pamela Tannahill, a managing consultant at Wood Mackenzie, an energy consulting firm. "Producers seek to monetize gas reserves," she told. The US, the UK, "China and India will be very important sources for future LNG demand."

Russia's oil output in the Far Eastern Sakhalin region is expected to amount to 20-21 million metric tons annually by 2009, Mikhail Belonin, director of the St. Petersburg-based All-Russia Petroleum Geological Exploration Research Institute believes. By 2010, the annual production of oil in the Sakhalin region is expected to increase to 22-23 million metric tons annually and to remain at this level until 2020, Belonin also said. The explored reserves of Sakhalin Island are expected to total 350 million metric tones of oil and 600 billion cubic meters of natural gas. The annual natural gas output on the island is expected to equal 25 billion cubic meters by 2010 and might reach 35 billion cubic meters by 2020, the *Itar-Tass* news agency reports, citing a forecast contained in Russia's Energy Sector strategy, prepared by State experts.

Until 2010, the majority of the oil and gas output is expected to be exported, while after this date a significant part of the produced output will be sold on the domestic market. Total investments in the geological exploration of oil and gas fields on Sakhalin Island over the next 15 years are estimated at 55 billion rubles ($1.83 billion), Belonin also said.

In 2004, export of fuel made up 51.7% of total Sakhalin regional exports and made up $473,782,600 USD.

In March 2005, Russian Government approved a natural resources draft law (*subsoil natural resources law)* which officials said would make resource auctions transparent but bar foreign-controlled bids for major oil or metal deposits. "In no way does this law close the auctions for foreign companies. It simply implies that they must create Russian-registered structures," said Natural Resources Minister Yuri Trutnev. "The devil, as always, will be in the detail. The proposals sound Draconian, effectively turning foreign oil companies into second-class citizens

in Russia, but the key issue will be how and where they are applied," the representative of UFG brokerage said. Troika Dialog brokerage said a proposal to scrap tenders in favor of auctions, and shift power from the regions to the central government, would help make contracts more transparent. The Natural Resources Ministry and the Ministry for Economic Development approved the list of fields to be auctioned in 2005. It is planned to auction 4 fields at the Barents sea shelf (resources – 977 million tonnes), as well as 3 auctions for Okhotsk sea shelf – Sakhalin-3 (resources – 600 million tonnes), Magadan-1 and Magadan-2.

The Russian Natural Resources Ministry is considering setting up a national oil company to develop shelf fields, Natural Resources Minister Yuri Trutnev announced. Trutnev spoke in favor of foreign participation in the company, seemingly contradictory to his plans announced in February to limit the access of foreigners and Russian companies registered in offshore zones to strategic hydrocarbon fields. However, Trutnev conceded that he had "a completely different stance "concerning the shelf. Shelf oil production is significantly more expensive. Russia is developing the shelf very slowly, having drilled only nine wells in the last ten years, and the shelf currently yields only 0.25% of Russia's total oil output. A way for foreigners to get access to these fields is to participate in a national oil company, in which the state is expected to hold a blocking share. Another way is to create consortiums with Russian companies. Yet foreigners are in no hurry to invest in the Russian shelf. "It is too early to speak of specific plans to join a national oil company in Russia," Glenn Waller, director of external affairs for ExxonMobil, which operates the Sakhalin 1 project, said.

Image by SEIC

Russian scientists state that the major discoveries are still to be made – Mr. Juri Schukin, Director of the Sakhalin Research and Project Institute of Oil and Gas reported at the Russian-Japanese Economic Forum 2005 in Niigata. Perspective and recoverable resources are estimated at 1 billion 900 million tonnes of oil and 3 trillion 300 billion cubic meters of natural gas. He pointed out that the perspectives for recourses and their extraction growth in the Sakhalin region are several times larger than those already discovered and are to the major part connected with the shelf of northern Sakhalin. Chances exist to discover unique oil deposits, with reserves of about 300 million tonnes of oil and 1 trillion cubic meters of gas. Results-to-date and the forecasts make it realistic to create a large oil and gas extraction complex on Sakhalin in mid-twentieth of this century, Schukin said. He spoke about annual extraction of 50-60 million tonnes of oil and 65-85 billion cubic meters of gas, which can cover internal Russian Far East needs and the export to the foreign neighbors. The best perspectives are related to Sakhalin-3 and Sakhalin-5, which significantly exceed Sakhalin-1 and Sakhalin-2 in reserves, the scientist believes.

The Sakhalin-I project approved budget for 2004 was at $ 1.367 bn. The amount of Sakhalin-1 investment increased almost 1.5 times in 2005 – from USD 1.4 billion in 2004 to 1.8 billion. In December of 2004 the budget for 2005 was approved. The total investment for the project is estimated at USD 12 billion. More than USD 3 billion was used already.

Sakhalin II has a total budget of $10 bn which one analyst said amounts to $ 2.50-$ 3 per boe, that will enable the year-round extraction of crude oil and natural gas in northern Sakhalin and its transport via pipelines to southern Sakhalin.

The two ventures increased spending by 20 percent to 25 percent each (to 2 billion dollars for Sakhalin-I and 4 billion dollars for Sakhalin-II) in 2005. The Sakhalin-1 operator intends to spend the money to commence production in 2005 instead of 2006 as initially planned, Ann Pickard, director of global businesses and strategy at Shell Gas & Power, said in an interview. "It's time to think about expansion. We are thinking about a third train," Pickard said. Shell expects demand for supercooled, compressed LNG to pick up sharply across the globe in the coming years, she said. Pickard said foreign exchange fluctuations, labor costs and environmental factors were also raising costs. Shell invested USD1,700 million in Sakhalin-2 in 2004.

Sakhalin I consists of the development of the Odoptu field (oil and gas, discovered in 1977) and the Chayvo field (mainly gas, discovered in 1979). The large Arkutun Dagi field was found in 1989. Sakhalin II will drain the Piltun Astokhskoye field. Piltun Astokhskoye lies 16km offshore Sakhalin Island's north-east shore, in the Sea of Okhotsk. It lies in 30m of water. The Sea of Okhotsk is subject to dangerous storm winds, severe waves, icing of vessels, intense snowfalls and poor visibility. The average annual extreme low ranges between -32°C and -35°C. Ice sheets up to 1.5m thick move at speeds of 1-2 knots. Offshore structures can be exposed to icing from October through to December, for around 187 days. During the ice-free period, wave heights range between 1-3m, but can reach as high as 19m during 100-year storm conditions. Strong north-east and south-east winds cause a great amount of sea agitation in fall and winter.

Sakhalin-1

Project Website: www.sakhalin1.com

The Russian-U.S. oil and gas project Sakhalin-1 will give Russia 12 billion dollars of investments and will create 13,000 jobs, according to specialists from Exxon Neftegas Limited, which is operator of the project.

According to its calculations, 12 million tons of oil and hundreds of billions of cubic meters of gas will be produced at three sea deposits of the Sakhalin north – Chayvo, Odoptu and Arkutun-Dagi.

Production of early oil from the Chayvo deposit will begin in September of 2005 (supplying oil to the Khabarovsk Krai territory, expected to produce almost 3 percent of the country's output),

while a full-scale production will begin in 2006, with output expected to reach a maximum of 250,000 bpd of low-sulphur, light crude oil. The 225-kilometer pipeline will transport Chayvo crude oil westerly across Sakhalin Island and the Tatar Strait to the DeKastri terminal. Nippon Steel Corporation and its Russian affiliate NS Nephtegazstroy Limited, as well as two Russian companies - LUKoil-Neftegazstroy, and SMU-4 - are involved in the construction of the pipeline, which is scheduled for completion at the end of 2005. More than 80% of the pipe is supplied by the Russian Vyksa Metallurgical Plant. The pipeline design capacity is approximately 12 million tons of oil a year (250 thousand barrels per day). The Orlan platform is being updated in South Korea to be then installed at Chayvo.

A 200-kilometer oil pipeline will extend from Chayvo to the port of De-Kastri in the Khabarovsk region. The DeKastri oil terminal is being modernized by Russian companies within the Sakhalin-1 project. The terminal will have oil tanks and loading equipment for servicing oil tankers with the capacity of 110,000 tons. Oil will be delivered by tankers of the Primorsk Shipping Company accompanied by icebreaker-class tow ships.

Fuel will be supplied to De-Kastri, from where giant tankers will transport it to countries of the Asian Pacific region. The Sakhalin-1 project also envisages natural gas production. “For the markets we're targeting, pipelines are more economical," Jack King, vice president of Exxon Neftegas Project Services Inc., told reporters. The Sakhalin-1 consortium also completed a feasibility study to build a natural gas pipeline to Japan. According to King, the study confirmed the pipeline is economically and technically viable. The ExxonMobil project is expected to start shipping natural gas in 2008. Exxon Mobil Corp. had also conducted negotiations with China and Korea over the supply of natural gas from the offshore Sakhalin-1 site. Analysts say the Sakhalin-1 Japan pipeline project has stagnated because it had aimed to create a market for pipeline gas in a region geared towards Liquefied Natural Gas (LNG). Japan, Korea and Taiwan currently import about 70 percent of the world's LNG. Japanese companies including Itochu Corp. and Marubeni Corp. are participating in the Sakhalin project, which aims to start commercial production of natural gas in 2008. But negotiations between Exxon Mobil and the Japanese side have stalled partly to compensation issues for Japanese fishing operations and the reluctance of Japanese utility companies to join the project. Japan views Exxon’s move to start talks with China as a strategy aimed at triggering a breakthrough in negotiations with the Japanese side. In the future, participants in the international consortium on the Sakhalin-1 project plan to export natural gas supplies to the domestic and external markets. "We are examining a plan to build a pipeline to China via the Khabarovsk territory," Mr. Bogdanchikov, president of the Rosneft oil company, said to the press in February, 2005.

In February, 2004 the Fluor Corporation announced that it had been chosen to provide engineering and procurement services for Sakhalin-1. The value of the contract to Fluor is in excess of $80 million. In summer 2003, Exxon Neftegas Limited selected Fluor for a separate contract to provide construction management services for the project. The scope of work under this management contract is valued at more than $500 million. Under this contract, 80 percent of which is subcontracted, Fluor manages several large Russian construction companies to install an onshore oil and gas processing facility and well-pad infrastructure near the Chayvo field.

Until recently, the participation of Japan's SODECO in the project implied the supply of gas from Sakhalin-1 to Japan either by a pipeline or in liquefied form. However, the project's profitability has raised serious doubts in Japan. Similar concerns on financial feasibility have been raised in China. The Sakhalin-1 project's current gas reserves make the construction of an expensive pipeline to China unprofitable. However, gas supplies to the country might become possible in the future - through the existing Sakhalin-Khabarovsk pipeline whose current capacity is still much lower than the potential supply volumes of Sakhalin-1. The expansion of this pipeline along the Khabarovsk-Vladivostok-Harbin route in the future will not only enable Exxon Mobil and Gazprom to enter the Far East gas market, but also to develop other projects on the Sakhalin shelf. The cost of the future gas pipeline is comparable with the cost of a gas pipeline from Kovykta, which means Gazprom will not have to hurry to develop other gas projects in western Siberia until 2010.

Sakhalin-2

Project Website: www.sakhalinenergy.com

The Sakhalin II Project is going through Phase 2 at this moment (details are available at the company web-site specified above) and involves a multi billion dollar investment.

Sakhalin is one of Shell's core investments, expected to contribute more than 200,000 bpd of additional oil and gas output. Giving the green light to the Sakhalin Energy Investment Company in May last year, Sir Philip Watts, then Shell's chairman, described the venture as "a strategic legacy project for Shell (which would) reinforce Shell's position as the world's leader in LNG".

The second phase consists of installation of an offshore platform at the Piltun Astoskhskoye field and the installation of a single large platform at the Lunskoye gas field. These platforms, as well as the Molikpaq (part of the Phase I), will be linked to the shore by offshore pipelines. The oil and gas will then be transported via 800 km of onshore pipelines to Prigorodnoye, in the south of Sakhalin Island, the site of a new LNG plant and oil and LNG export terminals. The platform at Lunskoye field will produce the major part of gas processed at the LNG plant. Nine subcontractors are involved in this construction, the total amount of people involved is more than 6 thousand people, 98% of which are Russian citizens (37% - Sakhaliners); each of the two pipelines crosses 126 kilometers of marshes, 110 kilometers of hills, more than 1 thousand stream flows, 18 roads and railroads. As of July, 2005 the workers completed almost 500 kilometers of the oil pipeline

Second office of SEIC in Yuzhno-Sakhalinsk

and about 200 kilometers of gas pipeline. The pipeline contract, worth $ 1.2 bn, involves the engineering, procurement (excluding line pipe), and construction of the two onshore oil and gas pipeline systems. One system of 20-24-inch pipeline and pumping stations will deliver crude oil from the northern production areas to an oil export facility in southern Sakhalin where it will be shipped to utility customers in Asia-Pacific and beyond. The second system, a 48-inch transmission pipeline and series of compressor stations, will deliver natural gas to the planned LNG liquefaction plant. A consortium led by the Russian contractor Starstroi -- a joint-venture of the Russian LUKoil-Neftegazstroi, the Italian company Saipem, and Paris-based Amec Capag -- is constructing the pipelines. The consortium is employing six Russian pipeline construction companies as subcontractors: SMU-4, Kubanneftegasstroi, Lizingstroimash, the Svarochno-montazhnyi Trust, Omsknefteprovoidstroi, and Vostoknefteprovoidstroi. Houston-based CRC Evans Automatic Welding supplied ten spreads of welding equipment for the project. Sakhalin Energy says the LNG plant now under construction on Sakhalin has been designed to withstand the most powerful earthquakes, which might occur once in 10,000 years. Should an earthquake of this kind occur while the plant is in operation, it will shut down in a safe mode.

Other coastal structures now springing up on Sakhalin in the framework of expanding oil and gas extraction have been designed to withstand strong tremors which occur every 500 to 1,000 years, according to the company.

*LNG construction site. Picture by **Yellow***

LNG will be shipped from the plant by tankers. In November, 2004, a contract for two ships went to a consortium consisting of Nippon Yusen Kabushiki Kaisha (NYK) and JSC Sovcomflot, while a second Japanese-Russian consortium consisting of Mitsui O.S.K. lines, Ltd (MOL), Kawasaki Kisen Kaisha, Ltd (K Line) and Primorsk Shipping Corporation, was awarded a contract for one LNG ship. The NYK Line/Sovcomflot consortium will have their two 147,200 m3 LNG ships constructed at Mitsubishi Heavy Industries with delivery scheduled for quarter 4 in 2007. The MOL/K Line/Primorsk Consortium will have their similar sized ship constructed by Mitsui Engineering & Shipbuilding for delivery by quarter 2 in 2008.

Sakhalin Energy Investment expects to deliver its first shipment of LNG in late 2007.

Sakhalin Energy won orders to replace some Indonesian deliveries to Japan as companies such as Tokyo Gas Co., Tokyo Electric Power Co., Asia's biggest power producer, and Tohoku Electric Power Co. seek to diversify supplies. The Shell unit has signed long-term agreements this year to supply 3.23 million tons a year, raising its orders by 83 percent. Tohoku Electric, Japan's fourth-largest power company, has a five-year contract ending in 2009 for 830,000 tons a year from Indonesia's PT Arun NGL. Tohoku Electric agreed with Sakhalin Energy to buy as much as 420,000 tons a year of the fuel over 20 years starting from 2010.

Sakhalin Energy also agreed to supply 210,000 tons of LNG a year over 20 years to Hiroshima Gas Co., which now relies on the PT Badak NGL project at Bontang in Indonesia's East Kalimantan province as its sole supplier of the fuel. Hiroshima Gas serves more than 426,000 customers in Japan's Honshu Island. Sakhalin Energy also has contracts to sell the fuel to Japan's Kyushu Electric Power Co., to Korea Gas Corp. and to the Energia Costa Azul LNG terminal, which will be built on Mexico's Pacific Coast. Sakhalin-produced liquefied natural gas will be shipped to Mexico and California; under the agreement, which marks the first sales of Russian natural gas to North America, the company will supply 37 million tonnes of LNG over a 20-year period with a plateau supply of 1.6 million tonnes per annum, SEIC said in a press release. In mid-2004 SEIC entered talks with China Petroleum & Chemical Corp., or Sinopec, for LNG sales after 2007, but no deals are on the table, a Sakhalin official said.

Taking into account forecasted LNG demand, SEIC may think about construction of a third train of LNG plant. According to Valery Nesterov (Troika Dialog) it is too early to think about the construction of the new train. Nesterov thinks that the total cost of sales (USD 6.5 billion) is adequate to the LNG prices that formed in this market in the current decade. Lev Snykov from Sovlink Securities agrees that Sakhalin-2 members will quickly solve the first two trains production sales problem and then will start to increase output. According to him, the market price of Sakhalin LNG may be as high as USD 8.3 billion. "But the price discount at this stage is a natural step for a seller"- Snykov adds.

Royal Dutch/Shell signed an asset swap deal with Russia's Gazprom under which Shell will give up part of one of its most valuable oil and gas projects. In a statement, Shell said Gazprom will acquire up to 25 percent plus one share in Sakhalin-2, while Shell will obtain a 50 percent stake in the Zapolyarnoye Neocomian field. The difference in value will be compensated through a package of cash and other assets. The deal is scheduled to be finalized in 2006. Gazprom had a virtual monopoly on the transport and sale of natural gas produced in Russia, with the exception of that produced in Sakhalin. Involvement in Sakhalin-2 will help Gazprom gain much-desired experience in LNG. LNG is expected to play an increasing role in world energy supply, and Gazprom sees it as a method by which it can monetise more of its huge gas resources.

Sakhalin-3

Project Website**:** http://www.rosneft.ru/english/projects/sakhalin3_2.html

In February 2004, Energy Minister Igor Yusufov said that the Russian government wants up to $ 1 bn for a license to explore and develop one of the three Sakhalin-3 blocks that a consortium led

by ExxonMobil won in a tender a decade ago. The announcement came a week after the government decided to annul the 1993 tender to explore the gas- and oil-rich project in the Pacific Ocean -- a move that US Ambassador to Russia Alexander Vershbow called worrisome and potentially harmful to US-Russia ties.

Yusufov said the state wants to auction off Sakhalin-3's Kirinsky block, the largest of the project's three blocks with estimated reserves of 453 mm tons of extractable oil and 700 bn cm of gas. Under the terms of the 1993 tender, rights to explore Kirinsky were equally split between ExxonMobil, ChevronTexaco and state-owned Rosneft. ExxonMobil controls two-thirds of the other two blocks, Ayashsky and East Odoptinsky, while Rosneft has the rest. Yusufov indicated that ExxonMobil and its partners are welcome to stay on -- providing they pay. "We are ready to support this companies. We don't want to kick them out," he said.

In September 2004, Rosneft and the Korea National Oil Corporation (KNOC) reached an agreement to cooperate in developing the Veninsky block (Sakahlin-3 project) and the West Kamchatka shelf off the Sea of Okhotsk. The parties, who hold exploration and production licenses for the fields, have undertaken the establishment of joint ventures. The companies may also finalize more detailed agreements. According to Rosneft, Veninsky fields have 51 million tonnes of crude oil, 37 million tonnes of gas condensate, and 578 billion cubic metres of gas as recoverable reserves. The reserves of the West Kamchatka shelf (26 structures) are forecasted at 900 million tons of fuel equivalent.

India plans to invest US$1.5 billion in the Sakhalin-3 project according to a report in The Hindu on November 14, 2004. This will be part of a US$ 3 billion investment in Russia's oil and gas fields. It was announced in February, 2005 that the State-run Oil and Natural Gas Corp. is likely to bid for a 10-15 percent stake in Russian oilfield Sakhalin-3. ONGC, through its subsidiary ONGC Videsh Ltd., already has a 20 percent stake in the Sakhalin-1 field.

The Natural Resources Ministry and the Ministry for Economic Development approved the list of fields to be auctioned in 2005. In 3 months after the new *Subsoil Law* is approved, it is planned to auction 4 fields at the Barents sea shelf (resources – 977 million tonnes), as well as 3 auctions for the Okhotsk sea shelf – Sakhalin-3, Magadan-1, and Magadan-2.

As was reported in June, 2005 - Chinese President Hu Jintao's visit to Russia has strengthened the strategic partnership between the two countries to a new high, but failed to secure firm Russian commitment to drastically increase oil supplies to China. At the same time, the Chinese leader failed to achieve the main goal of his visit — securing Russian commitment to build an oil pipeline to China.

The joint communiqué said only that the sides will "facilitate Russian-Chinese hydrocarbon projects, including the construction of an oil pipeline from Russia to China," and "instructed enterprises in both countries to carry out concrete consultations on the above projects." However, Mr. Hu's visit has not brought any clarity on this issue. Meanwhile, China's Sinopec oil company signed an important protocol with Russia's Rosneft on joint exploration and the development of an oil-and-gas block in the Sakhalin-3 project, which is also eyed by India.

Rosneft also agreed to increase oil shipments to China by rail from 4 million tonnes in 2004 to 9 million tonnes in 2005.

Rosneft –Sakhakimmorneftegas

Website: http://www.rosneft.ru/english/projects/sakhalin.html

Rosneft-Sakhalinmorneftegas (RN-SMNG) is Sakhalin's largest taxpayer, the company reported in a press release at the end of September, 2004. In the first nine months of 2004, the company paid over 97 million dollars in taxes, 23.5 million dollars of which were transferred to the regional budget. In the same period of 2003, the figures were 86 million dollars and 25 million dollars respectively.

Rosneft-Sakhalinmorneftegas office in Yuzhno-Sakhalinsk

On January 9, 2004, Rosneft-Sakhalinmorneftegas General Director Mr. Valitov held a press-conference on 2003 preliminary results. The year was quite successful for the company, 1652.8 thousand metric tons of oil were extracted (which is more than was forecasted, and higher than the level of 2002). Gas extraction met the plan. Rosneft-SMNG drilled 24.14 kilometers of wells, and the number of production wells increased by 41.

Rosneft has withdrawn from the Sakhalin-6 project, Rosneft President Sergei Bogdanchikov said on December 26th, 2003. "An additional analysis of sections for which Rosneft owns licenses has shown them not to be very effective," he said. As a result, the company has rejected the exploration license for these fields, he said.

The company's decision to withdraw from the Sakhalin-6 project was also influenced by the receipt of a license for more promising structures off the Sakhalin coast. Programs and technical research are also being compiled, which may be combined with similar programs for the Sakhalin-4 project. Drilling for these projects will be carried out separately, he said. Negotiations with BP on the inclusion of TNK-BP in the Sakhalin-5 project have not intensified recently. "Our position remains the same: at the moment we think that this is premature," he said.

In 2003 Rosneft-SMNG celebrated its 75th anniversary. The long history of the company also has its drawbacks – the fields are mostly depleted, Sakhalin oil is viscous and is even rated as "difficult for recovery". The wells are old, but the amount of hydrocarbons available for extraction is still high, but the fields are quite drowned and the oil is to be extracted with water. The methods for such oil extraction are quite expensive; from maintaining formation pressure to steam injection and fireflooding. The latter was invented by local scientists and was first

implemented in Russia by Rosneft; making it possible to extract oil from pocket zones. All this makes the extraction the most expensive in Russia (average price for Siberia oil is RUR 800-1200 per metric ton, on Sakhalin – RUR 2000-2300), while it is being sold practically at the same price. The major factors that help the company to be profitable are the development of new perspective fields and the upgrade of extraction technologies. The first deviated well at Odoptu filed was drilled for 9 months – now the same process takes less then two months. The technology was taken over by Exxon Neftegas and ENL is now drilling horizontal wells with the Yastreb rig at Chaivo (Yastreb's equipment is more up-to-date and allows drilling of wells up to 9.4 kilometers long (5.8 miles), while the Rosneft-SMNG drilled only a 7.4 kilometer well (4.6 miles). Horizontal (directional) wells are drilled first vertically, then horizontally under the sea bottom until they reach the hydrocarbon-bearing formation. The maximum allowed mistake is 32.8 feet (10 meters). The well can be in use all-year-round compared to the offshore wells.

The first Sakhalin shelf oil came from the horizontal well drilled by Rosneft-SMNG in 1998 (Sakhalin Energy produced the first oil in summer of 1999). Unfortunately the horizontal wells help to reach the fields that are located 10-11 kilometers (6-7 miles) from shore, and there still are perspective fields located 18 kilometers and farther from shore. Nevertheless, the directional drilling method can be used for a long time – there is still enough oil located close to the shore.

An increase of gas extraction can be possible only at the expense of new fields. The Vostochny Osoy field could be the nearest perspective. The field is 5 kilometers deep (3 miles), but there is no Russian-made equipment for such deep drilling available, and imported equipment is expensive and should be custom-made. Rosneft-SMNG is planning to shift equipment from Odoptu, after the project is over and drill at Osoy. The other two perspective gas fields are Ust'tomi-More and Mongi-More which will be thoroughly explored.

The company has several subdivisions that are involved in construction, oil products sales, and transportation. They help not only to provide all the necessary logistics for the parent company but also to obtain sub-contracts from the Sakhalin-1 and 2 operators. Rosneft-SMNG supplies Exxon and several construction companies with fuel from the Komsomolsk refinery, taking the leading place for fuel supplies in the region. Rosneft-SMNG has about 20 fuel stations on the road from Okha (Northern Sakhalin) to Korsakov (South of the island). Rosneft-SMNG promotes urban construction, being the major employer for such districts as Okha and Nogliki, where the company also performs social tasks - construction of housing, hospitals and schools.

BP - Rosneft-Sakhalinmorneftegas
Elvari Neftegas

Sakhlin-4 project website: http://www.rosneft.ru/english/projects/sakhalin4.html
Sakhalin-5 project website: http://www.rosneft.ru/english/projects/sakhalin5.html

The Russian state-run oil company Rosneft plans to invest about 16 % of its stake in the Sakhalin-5 project. Under an agreement with BP, the foreign company will finance all geological exploration work.

The Sakhalin-5 project includes the Kaigan-Vasyugan, East Shmidtovsky, Yelizaveta and Khanguzinsky blocks. Forecast reserves at the Sakhalin-5 contract zone are estimated at 783 mm tons of oil and 432 bn cm of natural gas.

According to preliminary estimates, the project may cost from $ 3 bn to $ 5 bn. Sakhalin-5 drilling began in July of 2003.

The operating company Elvari Neftegaz, the Sakhalin-5 operator, was registered in Yuzhno-Sakhalinsk and the Rosneft license for the Kaigan-Vasyugan block was transferred to this company on March 31, 2004. Company shareholders include Rosneft (51 %) and BP (49 %).

Rosneft and British Petroleum signed an agreement on basic principles of cooperation in implementing the Sakhalin-5 project. Between $ 150 mm-$ 170 mm.

will be spent on prospecting for oil. Prospecting will last until 2008. The alliance started a geophysical study on the East-Schmidt and West-Schmidt blocks of the Sakhalin-4 and Sakhalin-5 projects. In December 2003, Rosneft received a license to conduct a geological study on both of the blocks. According to BP, the alliance is not sure how long it will take to completely explore the new blocks. In 2004 BP-Rosneft purchased the results of a 2D seismic survey conducted by JSC Dalmorneftegeofizika on the East-Schmidt and West-Schmidt blocks. BP-Rosneft negotiated a contract to rent a deep-sea drilling rig for the first test bore well on the Kaiganskiy-Vasukanskiy block of the Sakhalin-5 project. This well is named Pela Leich. Under the Sakhalin-5 project, 5 wells will be drilled, the first of which was drilled in summer of 2004. According to a geological study made earlier, the project's forecasted reserves stand at 600 million tonnes of oil and 500 billion cubic meters of gas.

Exploration should end in 2008, Rosneft Senior Vice President Sergei Alexeyev was quoted as saying at a London Oil Conference.

Elvary Neftegas has started exploratory preparations to drill a second well at the Kaygansko-Vasyukanskiy block of the Sakhalin-5 project in spring 2005. In 2004 the project's first test well was drilled at the Pela Leich structure. In October 2004 Elvary Neftegas announced the results of its oil and gas discovery in a sandstone reservoir. The drilling results from the Pela Leich well is the first step of surveying and further development in this new oil and gas field on the northern Sakhalin shelf.

Sakhalin-5 will be developed under a standard domestic tax regime.

Pertosakh

Sakhalin-based oil company Petrosakh completed a 3D seismic survey for the Sakhalin-6 project during 2004, Yury Motovilov, general director of the company, said to journalists. In accordance with a license agreement between Petrosakh and the Natural Resources Ministry, the company plans to drill two test wells in 2005, using directional drilling. Between 2001 and 2004, the company spent 12 million dollars on a geological survey of Sakhalin-6, 5 million dollars of which were spent during 2004. The cost of drilling of the two test wells is estimated at

10 million dollars. In the first half of 2006, Petrosakh must submit a report on proven reserves to the Natural Resources Ministry.
In fall 2004, Alfa-Eco, the company that managed Petrosakh, sold 95% of its share in Petrosakh to JSC Urals Energy. The news was announced by the Regional Administration and confirmed by Petrosakh. Petrosakh owns a refinery in the Smirnykh district and is an operator for Sakhalin-6. The remaining 5% of shares belong to the Sakhalin Regional Administration, via *Sakhalinskaya Neftyanaya Kompaniya* (Municipal Sakhalin Oil Company).

Events

SIGOLD

More information on SIGOLD can be obtained at -

http://www.sakhexpo.ru/prev/eng/sigold.php

Oil Spill Response Equipment and Technologies, Facilities of Fire Fighting

Organizer: Institute of Sustainable Development
Date: Wednesday, October 05, 2005 - Friday, October 07, 2005
Maritime University; 50a Verkhneportovaya St.
Vladivostok, 690059
Phone: 7+4232 40-42-50
Fax: 7+4232-40-42-50
Website: www.msun.ru/exconf/en/ex/index.html
Email: svetlanak@hotmail.com

The general goals of the expo are - to generalize the world-wide experience in finding solutions to the problems of coastal-and-marine environment preservation and protection from the negative effects of anthropogenic activities; to discuss the latest technological achievements in coastal-and-marine nature management; to draw public attention to the state of the Far East seas ecology.

Sakhalin Oil & Gas 2005

Organizer: IBC Energy
Date: Wednesday, November 30, 2005 - Friday, December 02, 2005
Millennium Gloucester Hotel
Kensington, London
Phone: +44 (0)20 7017 4023
Fax: +44 (0)20 7017 4981
Website: www.ibcenergy.com/sakhalin

Email: jennie.sharp@informa.com

IBC Global Conferences announced the dates for the 9th Annual Sakhalin Oil & Gas conference. This year's event will take place on Wednesday 30th November - Friday 2nd December 2005 with the main 2-day conference being held on 30th November - 1st December at the Millennium Gloucester, Kensington.

Current options available at Sakhalin Oil & Gas 2005:

- 2-day conference -- 30th November - 1st December, Millennium Gloucester Hotel, Kensington
- Sakhalin Dinner -- 30th November, London venue tbd
- Breakfast Briefing -- 1st December, Millennium Gloucester Hotel, Kensington
- Post-conference seminar -- 2nd December, Millennium Gloucester Hotel, Kensington